

**REMARKS**

Reconsideration and allowance are respectfully requested.

All claims 1-49 stand rejected for anticipation under 35 U.S.C. §102 based on U.S. Patent 6,516,193 to Salmela. This rejection is respectfully traversed.

To establish that a claim is anticipated, the Examiner must point out where each and every limitation in the claim is found in a single prior art reference. *Scripps Clinic & Research Found. v. Genentec, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference, then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). Salmela fails to satisfy this rigorous standard.

Unlike Salmela, the inventors in this case recognized that there is a tension in network mobility between location and paging procedures. If the location cost is high, meaning that the user's location knowledge is accurate, the paging cost will be low, and paging messages need only be transmitted to a small number of cells. On the other hand, if the location cost is low, the paging cost will be high, and paging messages will have to be transmitted over a wider area. A problem with the typical location area procedures followed by Salmela is the associated signaling overhead. Location area signaling overhead is particularly problematic in shared network situations.

In fact, Salmela's comprehensive location area update approach adds substantial location area registration signaling load/overhead when the network is shared between different operators. There are situations, in shared network and other contexts, where there is no need for a location area update. The present invention resolves the problem of unnecessary location area updates for both idle and connected mobile radio terminals.

Salmela does not recognize the problem of unnecessary location update procedures and the related signaling overhead. Instead, Salmela states that the problem being addressed is to provide "tailored special services to which other mobile stations are not entitled for individual mobile stations." Col. 3, lines 4-6. Indeed, Salmela's invention is founded on the fact that the mobile station always performs a location update procedure—regardless of whether that mobile station can connect to a particular cell or not. The location update procedure is uniformly performed, and it always starts with the mobile station sending a location area update message to the MSC via the radio access network. See Figures 2, 3A, 3B, 4A, 4B, and 5. Salmela's text at col. 5, line 64-col. 6, line 5 indicates that the prior art location area update signaling always occurs:

the invention will be described in greater detail with reference to FIGS. 3A, 3B, 4A, and 4B, which illustrate location updating according to the different embodiments of the invention as a signalling chart. Signalling in FIGS. 3A, 3B, 4A and 4B partially corresponds to the location updating signalling explained earlier in connection with FIG. 2. These prior art steps are indicated in the accompanying drawings with the same numbers as in FIG. 2.

Figure 2 is admitted by Salmela to be the conventional location area update procedure. See col. 2, lines 27-64.

Independent claim 1 specifically recites a method "for reducing signaling associated with the mobile radio terminal selecting a new geographic coverage area" and now incorporates related features from original dependent claim 5. Salmela fails to disclose: "determining whether to select a geographic coverage area depending on the received information including determining whether to perform a location area update procedure based on the checked list." Salmela does not check whether to perform a location area update procedure, even if the location

area update request is ultimately rejected. Notwithstanding such a rejection, the related signaling overhead cost is still incurred.

Similar features from other independent claims are missing from Salmela. Independent claims 10 and 40 recite: "wherein the mobile terminal uses the information to reduce signaling between the mobile terminal and the radio access network by not performing a geographic coverage area update procedure for a geographic coverage area included in the list."

Independent claim 27 recites: "the one mobile terminal checking the list of forbidden location areas and not performing a location area update operation for a location area that is on the list of forbidden location areas in order to reduce signaling between the mobile terminal and the radio access network." Claim 32 recites: checking "the stored list prior to performing a subsequent geographic coverage area update" and determining "not to perform a location area update based on the checked list in order to reduce signaling between the mobile radio terminal and the radio access network."


Other claim features are also not disclosed in Salmela. For example, claim 27 recites a location updating reject message that includes the four fields recited in that claim. The Examiner fails to identify such a message in Salmela or where Salmela describes those fields. Multiple dependent claims recite subject matter to that quoted here from claim 6: "the radio access network is shared by first and second operators and the information indicates one or more geographic coverage areas belonging to one of the operators that does not provide service to the mobile radio terminal." The Examiner has not identified any specific text that teaches this feature. If the Examiner elects to maintain rejection of any claim in this case, the Examiner is requested to identify the specific lines of text that describe each claim feature rather than simply identifying entire columns of text for entire claims.

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Lacking multiple claim features, the rejection based Salmela must be withdrawn. The application is in condition for allowance.

Respectfully submitted,

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